THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN TECHNICAL EDUCATION EXAMINATION

783 **BUILDING CONSTRUCTION**

Time: 3 Hour. **Tuesday, 15th May 2007 a.m.**

Instructions

1. This paper consists of sections **five (5)** questions.
2. Answer all questions.
3. Each question carries **twenty (20)** marks.
4. Non-programmable calculators may be used.
5. Communication devices and any unauthorized materials are **not** allowed in the examination room
6. Write your **Examination Number** on every page of your answer booklet.

1. (a) Define the term “load distribution” in building construction.

   (b) (i) Mention three elements of a building that help in load distribution.

   (ii) Explain how improper load distribution can affect a building.

   (c) State three methods of ensuring uniform load distribution in multi-storey buildings.

2. (a) What is site clearance? Explain its importance before starting any construction activity.

   (b) (i) List four activities carried out during site clearance.

   (ii) Give two consequences of skipping site clearance procedures.

   (c) Describe three safety measures to be followed during site clearance operations.

3. (a) Explain the term "thermal insulation" in building design.

   (b) State four materials used for thermal insulation in buildings.

   (c) (i) Mention two benefits of thermal insulation to building occupants.

   (ii) Give two reasons why insulation is important in hot climate zones.

4. (a) Define the term "temporary works" in construction projects.

   (b) (i) Give three examples of temporary works used on construction sites.

   (ii) Explain the role of temporary works in ensuring project safety and progress.

   (c) State three factors to consider when designing temporary structures.

5. (a) What is quality control in construction?

   (b) (i) Identify three quality control procedures used during construction.

   (ii) Explain two risks of ignoring quality control on a project.

   (c) Mention three parties responsible for quality assurance on a building site.